

Abstract

An apparatus, system, and method for facilitating the transfer of heat between two fluids where preventing the mixing of the two fluids is imperative. In one aspect the invention is an apparatus for use in a heat exchanger system comprising at least one outer tube having an inner tube extending through the at least one outer tube so as to form an interstitial space between each inner tube and each outer tube; and a ridge located in each interstitial space and contacting the inner tube and outer tube so as to form a fluid passageway through each interstitial space. Preferably, the ridge is helical in shape and extends the entire length of the interstitial space. In other aspects, the invention is a heat exchanger system incorporating the apparatus and a method of using the apparatus.